

CLAIMS:

1. A video transmission apparatus for connecting to a network, comprising:

a central processing unit block; and
a peripheral block;

wherein said peripheral block includes a video processing unit for processing video signals from an image picking-up device and generating video data, a network control unit for controlling transmission and reception of said video data transmitted and received through a transmission medium inclusive of a network, and a first bus for connecting in series without any branch said video processing unit and said network control unit;

wherein said central processing unit block includes a central processing unit for processing said video data, a storage unit for storing video data from said video processing unit, a central control unit for controlling said video processing unit, said network control unit and said storage unit in cooperation with said central processing unit, and a second bus for connecting in series said central processing unit, said storage unit and said central control unit; and

wherein said first bus and said second bus are connected through a first buffer.

2. A video transmission apparatus according to claim 1, wherein said central processing unit and said central control unit control said video processing

unit, process the video signals from said image picking-up device and store the compressed video signals in a cycle of 1/30 fps and at a data transmission rate of at least 3.6 Mbps in said storage unit through said first bus, said first bus buffer and said second bus.

3. A video transmission apparatus according to claim 1, wherein said central processing unit and said control unit read out said compressed video data from said storage unit at a data transmission rate of at least 14.4 Mbps for a request of four users from said network control unit, and transmit said compressed video data to said network control unit through said second bus, said first bus buffer and said first bus.

4. A video transmission apparatus according to claim 1, wherein a second bus buffer is further connected in series to said second bus, and a third bus having expansion connectors connected thereto is connected to said second bus buffer.

5. A video transmission apparatus according to claim 4, wherein a video expansion unit is connected in series to said expansion connectors of said third bus, and a monitor is connected to said video expansion unit.

6. A video transmission apparatus according to claim 1, wherein said second bus provided to said central processing unit connects said central processing unit, said storage unit, said central

control unit and said bus buffer in order named, and said first bus provided to said peripheral block connects said bus buffer, said network control unit and said video processing unit in order named.

7. A video transmission apparatus according to claim 6, wherein said bus further connects in series a circuit for displaying an operating condition of said video transmission apparatus and a switch circuit for setting an operation of said video transmission apparatus.

8. A video transmission apparatus according to claim 1, wherein a dumping resistor is connected to a starting point or an end point of each of said first and second buses and a terminating resistor is connected to the other.

9. A video transmission apparatus according to claim 1, wherein said peripheral block and said central processing unit block are arranged on the same packaging board, said central processing unit and said central control unit are positioned at said central processing unit block which is located at a substantial center of said packaging board, and said peripheral block is disposed at a peripheral area of said central processing unit block of said packaging board.